SPECIAL REPORT: Managing Storage Across The Enterprise *page 36*

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Kamran Kheirolomoom, CEO, ViewStar Corp., with ViewStar, release 3.0

ViewStar Builds A Big Image

page 26

Managing X Terminal Memory Woes *page 45*

Getting Ready For PC RAID *page 53*

EDI II To The Rescue *page 60*

Software AG's Entire Client/Server Migration *page 75*

Making IS Accessible *page 79*

COMPARING OVER 125 486-BASED PCs

page 90

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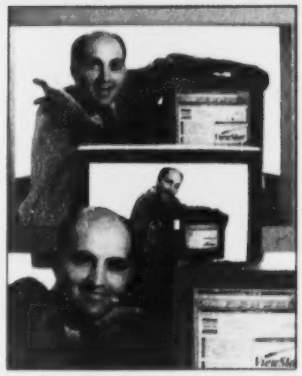

ON THE COVER: ViewStar's Kheirolomoom targets building applications on standard PC platforms, page 26.

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26 ViewStar Builds A Big Image

Tiny ViewStar has made its mark selling image management software to *Fortune* 500 firms. Now, as its software grows more powerful, ViewStar is growing with it.

SPECIAL REPORT

36 Managing Storage Across The Enterprise

The dream of extending mainframe storage management services to data stored on distributed PCs, workstations and LANs is about to become a reality.

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87 Program Once, Run Anywhere

Seer Technologies Inc.'s new High Productivity Systems (HPS) computer-aided software-engineering tool promises much and guarantees delivery.

88 Getting The Message

To make the world a little safer for electronic communications, Digital Equipment Corp. has added new ULTRIX client software to its Reliable Transaction Router global-messaging system.

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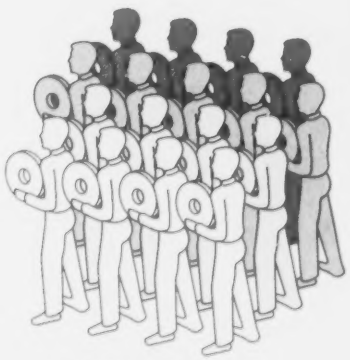
90 486 Boxes Provide Cheap Power

Processor power is going up; prices are coming down. That's music to the ears of IS managers.

PCs & WORKSTATIONS

45 Managing X Terminal Memory Woes

Running out of memory on your X terminals? Here are several proven techniques for avoiding terminal collapse.



SPECIAL REPORT: Data backup may be mundane, but it's as critical as ever, page 36.

PRODUCT GUIDE: Seer's Wadhwa stands behind his product, page 87.

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Once only for the mainframe elite, redundant disk array products are now turning up on mission-critical PC networks.

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Today's integration tools are linking business processes with EDI functions in a way that might stave off the need to reengineer.

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Vendors are pushing SQL access to nonrelational databases, but users say the drawbacks are significant.

CDC's Friede balks at SQL, accesses Natural, page 69.

75 Software AG's Entire Client/Server Migration

Move over, Mister Natural; Software AG's new Entire Function Server products help users make client/server more than hype in their shops.

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The law says your information system must be accessible to employees with disabilities. No problem.

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Unum's users of dumb terminals report higher labor savings than PC users.

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Is It Big Bucks Time For IS?

Will U.S. businesses finally break out of their recessionary mind-set and start spending some cold hard cash on new equipment next year? Maybe—but not without good reason. Recently released data from an industrywide information systems spending survey administered by CSC Index Inc., a subsidiary of Computer Sciences Corp., indicates that computer equipment buyers in at least some sectors of the U.S. economy may finally be able to pull out their checkbooks this year.

CSC polled 444 large North American organizations in a variety of industries late last year. The firm recently made the data public. In the report, CSC estimates that, on average, overall IS budgets will increase by 3.5% this year. But that's just the average number; certain industries—media/entertainment, pharmaceutical/medical products, transportation services and consumer products—are projecting spending increases of 7% or greater. When you measure planned IS spending as a share of corporate revenue, the top spenders will be telecommunications, aerospace, insurance and computers/electronics.

Order processing/handling, information systems development and post-sale customer service were cited most as the preferred areas of information technology investment in 1992.

CSC's data on 1992 IS spending complements a combined DATAMATION and Business Research Group (BRG) poll carried out last year of 150 IS managers, directors and vice presidents. Results were published in the January 1, 1992, issue of DATAMATION. That study found that 34% of IS managers expect IS expenditures to rise this year, while only 16% anticipate having to reduce spending levels below those of 1991.

By Madeline Franchi, Cahners Economics. For more information on Cahners Economics's forecasting services, including seminars, newsletters and database diskettes, contact Dan Buchan at (617)-630-2105.

How IS Spending Will Change This Year

Source: CSC Index Inc.

The Economy At A Glance

U.S. Economy: Macroeconomic And Industrial Indicators

	Actual		Forecast (Annual % Change)		
	Q3 91	Q4 91	1991	1992	1993
Gross National Product	1.8	0.8	-0.7	2.0	3.2
Business Investment In Equipment	6.7	-3.7	-3.5	3.2	4.0
Government Spending	3.4	5.4	0.9	2.5	2.4
Consumer Spending	2.3	-0.2	-0.1	1.7	2.9
Exports	7.3	13.1	6.6	7.1	3.8
Imports	22.3	2.5	-0.3	4.3	2.4

All calculations are % change in 1987 dollars; quarterly figures are seasonally adjusted annual rates.

	Jan. 1992	Dec. 1991	% Change 1 92-12 91	Jan. 1991	% Change 1992-1991
Manufacturing Production (1)					
Process Industries Total	107.9	107.8	0.1	105.7	2.1
Chemicals	113.6	113.2	0.4	110.1	3.2
Petroleum	107.8	109.3	-1.4	104.7	3.0
OEM Total	107.2	109.1	-1.7	109.3	-1.9
Computers & Peripherals	160.5	159.1	0.9	155.0	3.5
Communications Equipment	112.1	112.6	-0.4	108.4	3.4
Transportation Equipment	93.6	98.1	-4.6	97.6	-4.1
Services Employment (2)					
Finance, Insurance, Real Estate	6.635	6.683	-0.7	6.678	-0.6
Health Care	8.427	8.431	-0.1	8.040	4.8
Computer & Data Processing	0.859	0.860	0.0	0.811	5.9
Transportation Utilities	5.737	5.866	-2.2	5.802	-1.1
Retail Trade	18.950	19.820	-4.4	19.323	-1.9
Wholesale Trade	5.955	6.029	-1.2	6.086	-2.2
Government	18.471	18.811	-1.8	18.333	0.8

(1) Index 1978=100, seasonally adjusted
(2) Millions of persons, not seasonally adjusted

Source: Commerce Dept. and Cahners Economics

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